

AR23



ANNUAL REPORT

DOUGLAS AIRCRAFT COMPANY, INC.

1966

DIRECTORS

CHARLES R. ABLE, Group Vice President—Missile & Space Systems
WELLWOOD E. BEALL, Executive Vice President—Operations

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FREDERIC W. CONANT, Retired; formerly Vice Chairman of the Board of Directors of the company and Senior Vice President—Manufacturing

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DONALD W. DOUGLAS, JR., President

GEORGE F. GETTY II, President and Director, Tidewater Oil Company

THEODORE W. JOHNSON, Senior Vice President, Security First National Bank

CHARLES S. JONES, Director, The Atlantic Richfield Company

RICHARD LLOYD JONES, JR., President, Newspaper Printing Corporation, Tulsa, Oklahoma

DR. WILLARD F. LIBBY, Director, Institute of Geophysics and Planetary Physics, University of California

JACKSON R. McGOWEN, Group Vice President—Aircraft

NEIL PETREE, Vice Chairman of the Board of Directors and Chairman of the Executive Committee, Barker Brothers Corporation

DWIGHT WHITING, Vice President, Alexander & Alexander, Inc.; Partner, El Toro Company

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*WELLWOOD E. BEALL, Executive Vice President—Operations

*JACKSON R. McGOWEN, Group Vice President—Aircraft

ROBERT L. HOSKINSON, Vice President—Associated Activities

LOUIS LIEBER, JR., Vice President—General Counsel

MICHEL E. OLIVEAU, Vice President—Corporate Representative, Europe, Middle East & Africa

HAROLD E. SHOWALTER, Vice President—Controller

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R. L. BROWN, Assistant Treasurer

PAUL S. FARR, Assistant Treasurer

JOHN W. KREUZER, Assistant Treasurer

NEWMAN L. DOTSON, Assistant Secretary

M. L. SCOTT, Assistant Secretary

ELMER J. STONE, Assistant Secretary

*Management Committee

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NEIL PETREE

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FINANCE COMMITTEE

DONALD W. DOUGLAS, JR.

DONALD W. DOUGLAS

MILO W. BEKINS

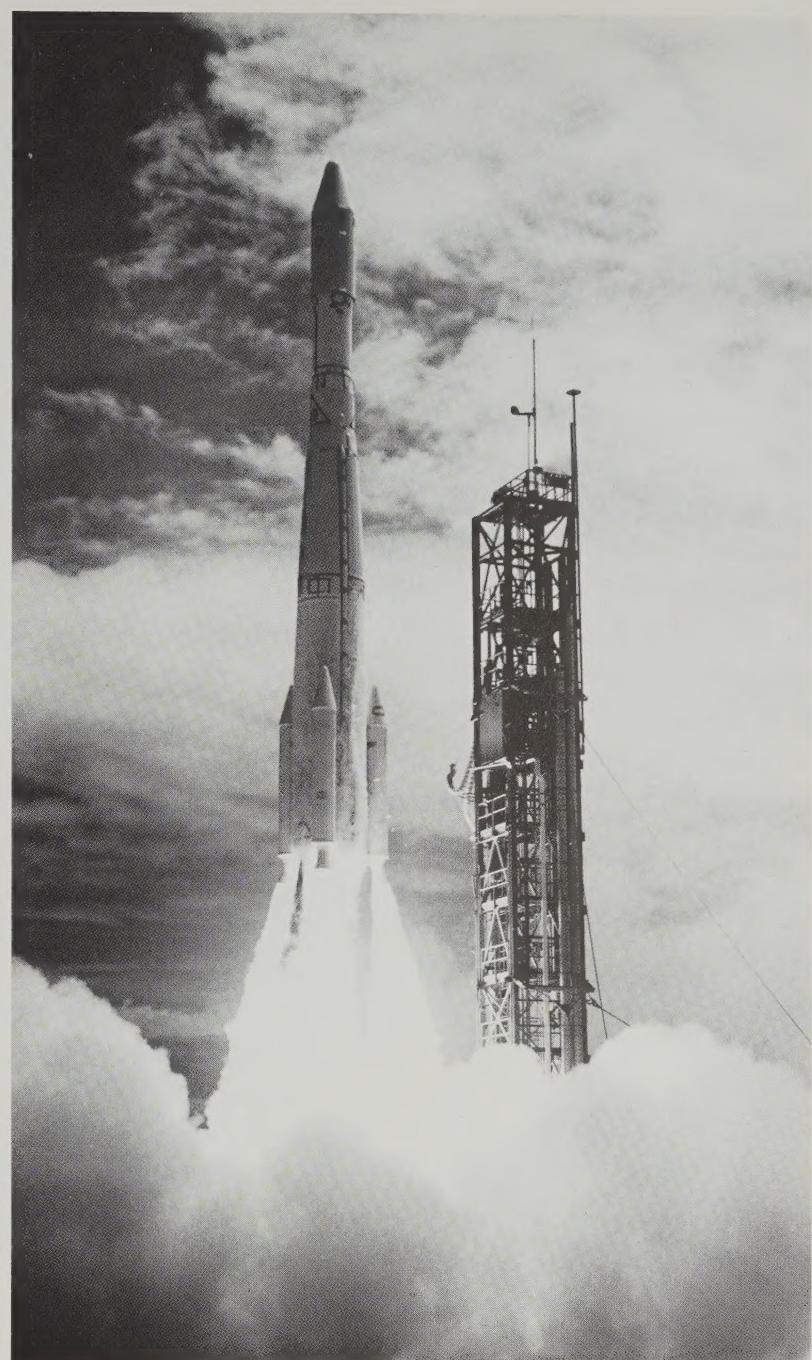
GEORGE F. GETTY II

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Financial Highlights

	1966	1965
Sales	\$1,048,012,000	\$ 766,790,000
Net Income (Loss)	(27,560,000)	14,598,000
Research and Development		
Expenditures	86,939,000	62,986,000
Working Capital	34,413,000	109,277,000
Stockholders' Equity	174,838,000	175,067,000
Backlog at Year-End	3,274,511,000	2,041,739,000
Payrolls	639,084,000	461,326,000
Employment at Year-End	80,200	60,300
Stockholders	31,303	23,311
Per Share:		
Net Income (Loss)	\$(5.23)*	\$ 2.77*
Stockholders' Equity	\$ 33.18*	\$33.22*
Dividends:		
Cash	\$.75	\$.60
Stock	3%	4%

*On basis of 5,269,624 shares outstanding at November 30, 1966

TO THE STOCKHOLDERS

On January 13, 1967, the Board of Directors announced it had agreed to proceed immediately with negotiations looking toward a merger with the McDonnell Company.

This action, 46 years after the company's founding and almost four decades after its incorporation, was taken only after the most intensive study and careful consideration of the best interests of our stockholders and employes.

On January 24, 1967, Douglas and McDonnell signed a letter of intent respecting the proposed merger. In pursuance of one of its provisions, McDonnell purchased from Douglas 1,500,000 shares of authorized but unissued common stock at \$45.80 per share; this was the average closing price on the New York Stock Exchange for the 30-day period preceding the date of receipt of the McDonnell purchase offer.

Our 1966 fiscal year began favorably, but in mid-term adversity struck unexpectedly, and buffeted us increasingly through the remainder of the year. Factors contributing to this include shortages in materials and skilled labor, delays in the delivery of key components from suppliers, and rising manufacturing costs as our Aircraft Division sought a rapid buildup of production at the same time it was introducing four new models in a multiplicity of customer-prescribed configurations.

These conditions, aggravated by the Vietnam conflict, caused a delay in the delivery of aircraft which, in turn, nullified earnings expectations and increased our need for working capital to support larger inventories.

Merger has been precipitated by these events and can be expected to provide tangible assistance in overcoming our immediate difficulties. But it does more: it recognizes that a condition for competitive survival in our industry is the amassing of greater strength than we might be able to acquire by ourselves.

Recent years have demonstrated strength in technology, industrial capacity and financial resources is needed



to sustain major aerospace programs, and it seems clear that this requirement will continue to escalate in the years ahead. The proposed merger provides assurance that this challenge will be met.

The problems encountered have resulted in extremely adverse 1966 results for the company, despite the excellent performance of our Missile & Space Systems Group. (Details concerning both Groups appear elsewhere in this report.)

For the fiscal year ending November 30, 1966, we report a net loss of \$27,560,000, or \$5.23 per share based on 5,269,624 shares outstanding. Sales for fiscal 1966 totalled \$1,048,012,000, up from \$766,790,000 in 1965.

Backlog at year's end was \$3,274,511,000. The orders represented by that figure testify to the performance and reputation of Douglas products. Our boosters and space vehicles continue to be outstanding among major elements of the national space program; our Navy A-4 Skyhawk is proving its mettle in the skies over Vietnam; and our DC-8 and DC-9 jetliners are setting new standards of comfort and efficiency along the airways of the world.

The success of these products, our superb resources in both technological manpower and research facilities, and our demonstrated ability to win major government programs like MOL—all this appears to place us in a good position to move ahead. But progress requires both growth and change; we have many times remarked upon the dynamic nature of our industry and it has never been more evident than now.

We must have adequate financial resources, in addition to all our other capabilities, if future growth is to be assured. Securing new business requires continuous acquisition of new research facilities and a steady modernization of plant and tools. And, finally, the magnitude of much of this new business dictates the availability of very substantial working capital. This is the lesson of our 1966 experience.

Douglas experience, capability and current product

lines constitute a strong base for future growth. On the aircraft side, we anticipate that the DC-9, now the standard of excellence for short-to-medium range service, will remain in production at least until 1980. Our DC-8 Super Sixty models should remain in demand for from six to ten more years, despite the advent of even larger aircraft. With economy that rivals that of the so-called jumbo jets on a seat-mile basis, and offering more economy on a plane-mile basis, the enlarged DC-8's will long have an important role along many of the world airlanes. Meanwhile, we sustain the high competence of our aircraft engineering so that new models may be introduced when it appears propitious.

The Missile & Space Systems Group is equally well positioned. Its performance in the design, production and launching of boosters and space vehicles is unsurpassed in our industry. With capability that is deep, versatile and well demonstrated, MSSG is poised to accept the challenge no matter what direction the national space program may take in the future. This includes, notably, the advantages being gained through our experience in nuclear operations at Hanford, Washington, for nuclear propulsion may loom large in future space programs. The Group's experience and capability in the field of missile weapons are equally impressive, and are reflected in the assignment to it of a key role in the development of a missile defense system.

Thus to the proposed McDonnell Douglas Corporation we bring not only the great heritage of our company and a tremendous backlog of orders, but also a major infusion of experience and competence so that, together, we may march ahead.

Donald W. Douglas

Chairman of the Board

Donald W. Douglas Jr.

President

January 31, 1967

Aircraft Group

For the Aircraft Group, the 1966 fiscal year was one of unprecedented expansion and activity. New highs were attained in the number of commercial transport orders booked during a single year, in backlog of commercial orders, in the number of new model aircraft flown and in employment.

Despite these apparently favorable circumstances, and partially because of them, results fell considerably short of expectations with respect to deliveries and control of manufacturing costs.

Reasons for this situation are complex, involving a number of internal and external factors. Escalation of the Vietnam war and a general rise in business activity created shortages of material, parts and skilled labor which affected both the Aircraft Division and its suppliers. Delays in the delivery of engines, landing gear and other key components to Douglas seriously disrupted the acceleration of aircraft assembly rates programmed for 1966.

Other adverse factors included the introduction of four new aircraft models on the assembly lines almost simultaneously, a proliferation of changes to each basic configuration dictated by the requirements of many new customers, and the necessity for training a large part of a fast-growing and inexperienced work force. The effect of these circumstances was a rise in manufacturing cost and a delay in aircraft deliveries.

Vigorous efforts toward improvement of this situation have been under way for some months and a number of the adverse conditions of the past year appear to be diminishing. A strengthened management throughout the manufacturing organization has revised procedures to deal with deficiencies.

On the basis of recent experience, some material shortages can now be anticipated and orders placed sufficiently in advance to meet production requirements. The aircraft assembly rate has been adjusted to coincide with a revised schedule of engine deliveries. Some major sub-assembly production has been diverted to other Douglas plants and to sub-contractors.

Only one new model will be introduced on the assembly line in 1967, by contrast with 1966 when the Series 30 DC-9 and the three Series 60 DC-8 models were introduced. This will take place during the latter half of the year when a substantially stabilized work force will have had the opportunity to gain experience, with a corresponding rise in production efficiency.

As a consequence of efforts now being made, the company hopes to deliver more than 50 DC-8s and 170 DC-9s during fiscal 1967. This compares with 34 DC-8s and 64 DC-9s during 1966—a new high of 98 jetliners during a single year. An indication of the extent of

expansion at the division is the fact that in 1965 31 DC-8s and three DC-9s were delivered.

Orders booked during the fiscal year totaled 293 jet transports, of which 112 were four-engine DC-8s and 181 were twin-engine DC-9s. This represents a new high for the company both in number and dollar value of commercial transport orders. With 278 DC-8s and 67 DC-9s already delivered, the year-end backlog stood at 156 DC-8s, including 138 of the advanced Super Sixty Series, and 342 DC-9s.

Significant to the division's future operation is its broad product line which seems assured of a long production life.

Eight basic commercial and military aircraft models, plus cargo versions of the six commercial transports, are being manufactured. They are the Series 50 and three models of the Series 60 DC-8, the Series 10 and Series 30 DC-9, and the A-4F Skyhawk attack plane and the TA-4F Skyhawk trainer. A ninth model, the Series 40 DC-9, will be added during 1967 and the Series 20 DC-9 in 1968. The Series 20 transport combines the Series 30 wing with the Series 10 fuselage, a combination offering exceptional short-field operating capabilities.

Because of superior performance and earning capabilities, the Super Sixty Series DC-8s may be expected to remain competitive well into the 1970's. In its first year of airline service, the DC-9 established unequalled standards of passenger popularity, mechanical reliability and low operating cost. These qualities and the strength of the world-wide market are expected to sustain production of various series of the DC-9 until approximately 1980.

Four models of the product line, three commercial and one military, were flown for the first time during 1966. First of these was the DC-8 Super 61, largest commercial jetliner in the air, with a fuselage 37 feet longer than earlier DC-8s and a passenger capacity of 251.

A highly successful flight development program began for this new aircraft on March 14 when it first lifted from the Long Beach airport. A Federal Aviation Agency type certificate was granted on September 1, establishing performance which meets or exceeds predictions. Orders for this model, including convertible cargo-passenger versions, total 70. It is scheduled to enter airline service in February 1967.

The Series 30 DC-9, developed to reduce seat-mile operating costs by increasing payload, was first flown on August 1. After equalling or surpassing predicted performance during its flight test program, it was certified ready for airline service on December 19.

This new version of the DC-9 closely resembles the earlier Series 10 model except for a 15-foot extension of the fuselage and a four-foot increase in wing span. The longer cabin increases both passenger and under-floor cargo capacity. Another difference is the addition



Busy DC-8 and DC-9 assembly lines at Long Beach reflect huge backlog of commercial orders



DC-8 Super 61, 37 feet longer than earlier DC-8s, on maiden flight

of leading-edge wing slats, which extend forward during take-off and landing to increase wing lift. Orders for this model, from 24 airlines, total 275.

The Series 40 DC-9, with a cabin six feet longer than the Series 30 model, will seat up to 125 passengers. It will be powered with an advanced model of the Pratt & Whitney Aircraft JT8D turbofan engine, which provides 500 more pounds of thrust for take-off.

Third of the new transport models test flown in 1966 is the Super 62 DC-8, the world's longest range commercial jetliner. First flight of this advanced transport took place August 29 and test data obtained subsequently demonstrates it will meet or exceed all performance guarantees.

Improvements on the Super 62 include the Douglas-developed long duct pod, which discharges by-passed air at the jet nozzle, and newly designed nacelles and pylons which reduce drag. These aerodynamic refinements, plus a six-foot increase in wing span, enable the Super 62 to fly profitably over distances beyond the capability of other current transports, while carrying up to 189 passengers. Orders from seven airlines total 33, and deliveries will begin in the spring of 1967.

The DC-8 Super 63, which combines the extended fuselage of the 61 model with the aerodynamic improvements of the Super 62, was scheduled for roll out in March and flight in the early part of this year. Orders had been received from 14 airlines for 41 of these transports prior to roll-out.

Fourth of the aircraft making maiden flights in 1966 is the newest version of the U.S. Navy Skyhawk, one of the most active combat aircraft in the Vietnam war.

The A-4F version was first flown from the Palmdale, Calif., final assembly facility on August 31. It is improved over earlier models in speed, range, maneuverability, altitude and armament capacity. These advancements are the result of a Pratt & Whitney Aircraft J52-P jet engine with greater thrust, plus advanced avionics, steerable nose wheel and landing spoilers on the wings. The latter two features improve operations from land bases, thus expanding the Skyhawk's capability as a tactical support aircraft. New orders for these aircraft, including purchases from abroad, will extend production through 1968.

A two-place trainer version, designated the TA-4F, also is in production on the same assembly line. This airplane embodies all improvements of the A-4F in addition to a second cockpit and dual controls for a student pilot. The TA-4F retains the full combat capability of the versatile A-4F, and both versions have improved emergency escape systems for pilot ejection even while the aircraft is stationary. Delivery of the Skyhawk trainer began in May 1966 and will continue through calendar 1968.

In addition to military and commercial airplanes, the division manufactures a number of other products in the aircraft field. Outer wing panels for the Navy and Air Force Phantom II fighter are produced under a subcontract with the McDonnell Company. Douglas has delivered more than 16,000 sets of bomb ejector racks for combat aircraft, including the F-4 and F-105, and the program is expanding. A new version designed for reduced drag is under development for both Air Force and Navy evaluation.

Another continuing program is the production of pilot emergency escape systems which have been selected for use on the Navy A-7 and the Air Force B-57 aircraft. In addition to those being delivered, a new version is under development. In August the division won an industry-wide competition to design, develop, fabricate and test a stabilized ejection system for existing and future Air Force planes.

A significant step in the division's efforts to expand its military business was a contract received during 1966 for a conceptual study of an Airborne Warning and Control System (AWACS). Douglas was one of two firms receiving \$2.1 million contracts for preliminary studies of a transport carrying highly sophisticated radar, communications and data processing equipment. The Aircraft Division's concept is based on a variation of the DC-8 Super 62, which would be capable of long endurance flights during both air defense and tactical support missions.

Another contract from the Air Force is for an advanced materials handling support system which will form the basis for expansion and modernization of the 463L materials and handling system.

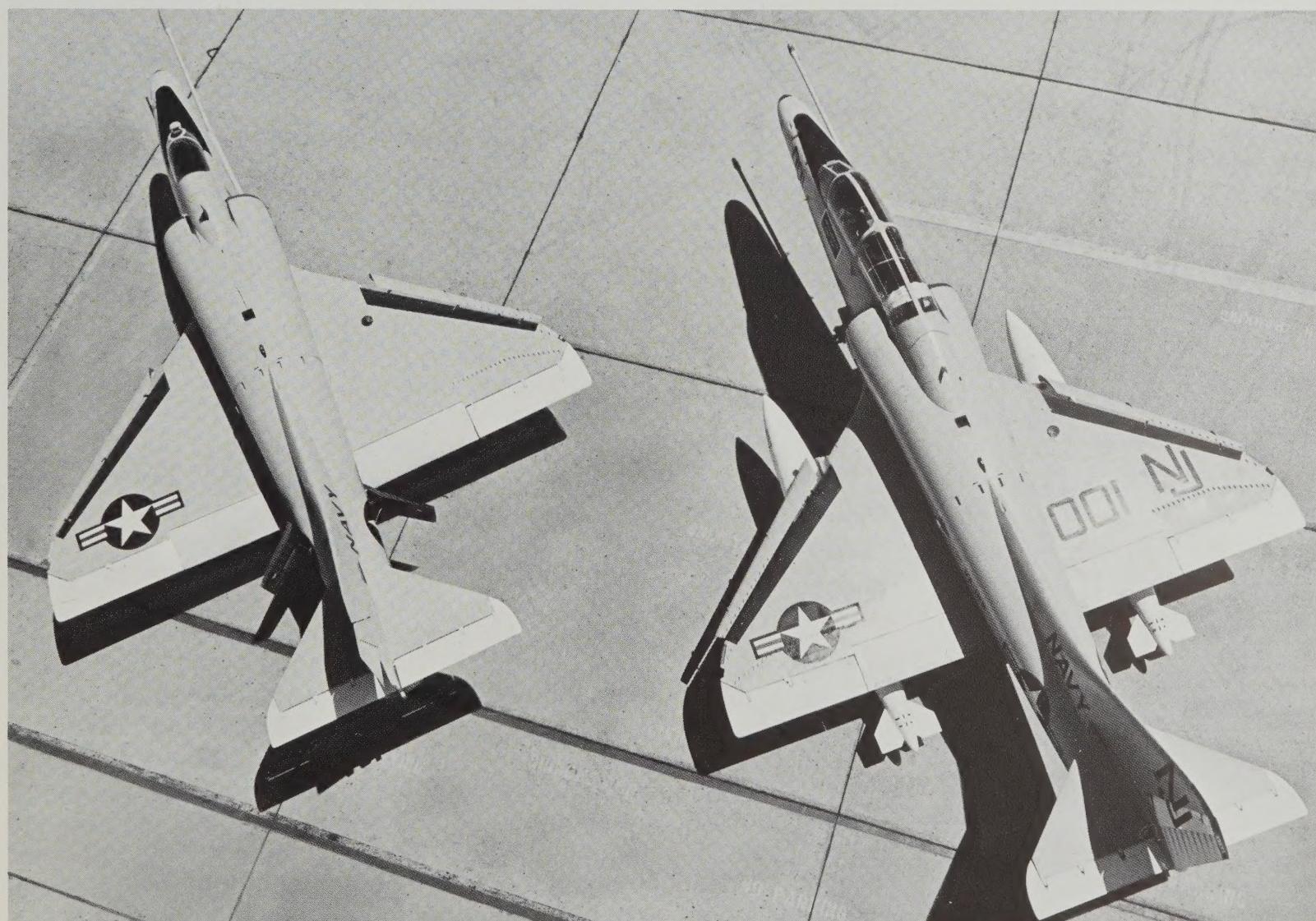
Other marketing attention is being given to a proposed jet transport for aeromedical evacuation operations, a task for which the DC-9 is well suited.

Douglas also was awarded one of three study contracts by the Navy to investigate the concept of a carrier-based advanced anti-submarine aircraft presently identified as the VS(X). The study, submitted in April, was received favorably and the company has continued an independent effort in order to enter the strongest possible design in the succeeding round of competition.

An experienced Douglas team is developing a design concept in preparation for an expected competition for an advanced jet trainer to follow the TA-4F.

Flight development of four models within a single year, probably without precedent in the industry, highlighted a broad spectrum of technical progress for the Aircraft Division. Concurrent with this was a program of developing and certifying Category 2 all-weather landing systems, which permit airlines to operate from airports during conditions of visibility presently prohibitive.

In other areas of technology, an important research and development program was devoted to sound suppression for turbofan jet engines. Advanced aerodynamic developments covered a broad area, while operating safety studies included improvement in braking under wet runway conditions and methods of predicting clear air turbulence. Materials research was highlighted by work in the new field of composites, the



Newest versions of Navy Skyhawk aircraft, A-4F and TA-4F



First of DC-9 Series 30 aircraft rolls from assembly line at Long Beach

synthesizing of lightweight, non-metallic materials suitable for aircraft structures.

In June the position of Vice President-General Manager of the Aircraft Division was established as a separate function and the position filled by Jesse L. Jones, previously Vice President-Deputy General Manager, Missile & Space Systems Division. Jones brought to the division a distinguished record of accomplishment during his 30 years in an ascending series of assignments with Douglas in the field of manufacturing.

Significant events during the year, in addition to first flights, included roll-out of the Series 30 DC-9 on July 11, roll-out of the first A-4F on August 3 and the DC-8 Super 62 on June 28.

One of the year's spectacular events was the non-stop flight of the DC-8 Super 61 from Long Beach to Tokyo, a distance of 5,630 statute miles, on August 16. It was the longest flight ever made by a commercial jetliner from the West Coast of the United States to the Orient. Two days later the same airplane flew 5,850 miles non-stop from Tokyo to Winnipeg. Both flights were made under official auspices of the Federation Aeronautique Internationale and will be authenticated as official point-to-point distance records.

At the close of the fiscal year employment in the Aircraft Group reached a new high of 45,000, of which 35,500 were at the headquarters facility at Long Beach. A year earlier the respective totals were 36,000 and 26,300.

Another element of the Aircraft Group, the Aircraft Modification Division at Tulsa, Okla., expanded employment during the year from 3200 to 4100 as it continued work on a number of programs. Present and anticipated

work should continue employment near the current level.

The largest modification program continues to involve the Air Force B-52. A follow-on contract for work on 40 of the giant bombers was obtained for the government's current fiscal year.

A new program earned during the year is for the refurbishment and modification of 25 A-4B aircraft for the Navy. Similar work on the same model of the Douglas Skyhawk, for use by the Argentine government, is being carried forward.

A maintenance contract for 26 RB-66 Destroyers, also a Douglas product, was signed in July. Electronic modification also will be performed on a majority of these aircraft.

A/RIA (Apollo Range Instrumented Aircraft) is another significant Air Force program at Tulsa, continuing through 1967. Under a \$27 million contract eight C-135s are being modified into EC-135Ns for National Aeronautics and Space Administration and Department of Defense space programs.

The first A/RIA aircraft was flown September 19 and during the last Gemini 12 flight became the first airplane to communicate directly with an orbiting spacecraft. The Air Force described this first test mission as highly successful. The aircraft will be used for worldwide communications on the NASA Apollo/Saturn flights.

Other maintenance work at Tulsa involved 10 WB-47 and two TB-47 aircraft. The latter two, electronics-equipped, are operated by the division for the Navy under a classified program.

During 1966 Tulsa's role in fabrication and assembly for the DC-8 and DC-9 jetliners steadily increased.

Missile & Space Systems Group

Outstanding success in the Saturn launch vehicle program and progress in development of the Air Force Manned Orbiting Laboratory and the Spartan, an advanced Zeus missile for the Army's Nike-X Missile Defense System, were significant factors in a year of progress for the Missile & Space Systems Group.

As a major participant in NASA's Apollo/Saturn program, Douglas moved to the point of readiness for the first manned flight of the Upgraded Saturn I. As second stage of the giant launch vehicle, a Douglas S-IVB will help boost a three-man Apollo spacecraft into orbit around the earth.

In three unmanned test flights over the past year, the S-IVB stage performed with near perfection to prove itself ready for manned missions.

In its maiden launch, the S-IVB helped send an Apollo on a 5400-mile sub-orbital flight for a test of the spacecraft's heat shield. On the next flight, the S-IVB itself became the launch payload, converted into a flying laboratory equipped with television cameras and other devices which permitted engineers to study the behavior of its liquid hydrogen fuel as the stage whirled weightless in orbit at an altitude of 115 miles. The flight represented a highly successful first effort for Douglas in a new area of business—designing and building space experiments. On the third, sub-orbital launch, the S-IVB helped lob an Apollo three-quarters of the way around the globe, to splash down in the mid-Pacific after another searing heat shield test. Once again, the Douglas stage and all other major elements of the launch vehicle and spacecraft functioned flawlessly, clearing the way for NASA to make the next flight a manned one.

In the U. S. Air Force's high priority Manned Orbiting Laboratory (MOL) program, contract negotiations are complete and the development phase is under way.

This is the Air Force's first manned spacecraft program, and it is expected to be a major long-term activity at MSSD. This project gives the company a leading position in the manned spacecraft field. Personnel build-up for MOL is under way at the Space Systems Center, again confirming the sound judgment of company management in investing in the development of the Huntington Beach facility.

The Manned Orbiting Laboratory will provide shirt-sleeve environment for two Air Force aerospace research pilots for up to 30 days in earth orbit.

Paced by these successes, the Missile & Space Systems Division, principal element of the Group, enjoyed a rewarding year in many other areas of effort as well. These included significant progress in development of the longer range advanced version of the Zeus missile;



Saturn V launch vehicle, with Douglas S-IVB third stage



Improved Delta on launching pad at Vandenberg

continued high performance by the reliable Thor and Delta launch vehicles for unmanned spacecraft, and a large degree of success in competitions for new missile and space development programs.

The division carried on its programs of advanced research on a broad front, continuing to improve its technological position for future programs. In the area of nuclear research, the new Donald W. Douglas Laboratories at Richland, Washington, were completed during the year, and a staff of highly skilled scientists moved in. The facility will serve as the key element for development of MSSD's nuclear technology and application of that technology in missile and space programs.

At the same time, the division's experience and repu-

tation in operational nuclear technology grew through its participation in the joint venture company, Douglas-United Nuclear, which operates reactors and plutonium fabrication facilities at the Atomic Energy Commission's Hanford plant.

Among other important developments of the year was the establishment of two new subdivisions, enhancing MSSD's ability to meet the needs of present programs and to prepare for future requirements. Each is headed by a division vice president.

The reliability and launch operations subdivision was formed as the result of an intensive study of MSSD's already highly successful operations at field stations and launch sites. It combines the division's front-line forces at the field stations and test centers with headquarters personnel responsible for vehicle reliability in a single organization at the time when MSSD becomes directly involved in manned space programs.

The new information systems subdivision was organized to effect the most efficient use of computers, as both a technical and management tool, through centralized control. It will serve the entire division in providing improved computer-based operations. The subdivision's experts have three main functions: developing improved and integrated information management systems; providing effective computer operating systems for present uses, and providing systems analysis and guidance on new operational uses of computers.

Saturn remains the largest single program in the Missile & Space Systems Group, with total value of the program to the company expected to be more than one billion dollars. Douglas builds the S-IVB for NASA's Marshall Space Flight Center, for use as upper stage on both the Upgraded Saturn I and Saturn V launch vehicles.

In addition to bringing the S-IVB to the point of readiness for the first manned flight of an Upgraded Saturn I, the past year also saw the completion and testing of two stages for use on the Saturn V lunar launch vehicle. The first of these was delivered to Cape Kennedy in the fall, and is now being prepared for flight. The second was successfully test fired and is awaiting shipment to the Cape.

The loss early in 1967 of the third S-IVB intended for use on a Saturn V demonstrated the difficulties sometimes encountered in advanced development programs of this type. The stage exploded and burned on the test stand at the Sacramento plant in the last minutes of the countdown before its final test firing.

Nevertheless, the program moved ahead. Another Saturn V stage was delivered to Sacramento within the week and the program management addressed itself to the task of adjusting schedules to meet NASA's delivery requirements.

A major event during the year from the program management standpoint was the conversion of the Saturn contract from a cost plus fixed fee to a cost plus incentive fee basis. The new contract provides a carefully

structured schedule of incentive milestones designed to reward the company for outstanding performance, or to penalize below-par performance.

The incentive contract worked well as a management tool, for both NASA and the company, with results beyond expectations. During fiscal year 1966, MSSD earned 95 per cent of the incentive payments available under the contract — worth over \$3 million.

Prospects for follow-on orders for S-IVB stages appeared good at year's end. Determination of the number to be procured and the production schedules will be dependent on funding available to NASA in the federal budget.

At the same time, MSSD is playing a prime role in the development of uses for Apollo/Saturn program hardware and technology beyond the lunar landing program, and in studies of advanced versions of the Saturn vehicles to perform future space missions.

Late in the year, NASA disclosed plans for using an S-IVB stage as an orbiting "workshop" after its fuel has been exhausted. It will be fitted with an airlock permitting astronauts to enter the stage's liquid hydrogen tank from their Apollo spacecraft, and will have a life support system that will let them live within the tank for up to 30 days. MSSD is making modifications to the S-IVB that will allow the astronauts to convert it into a livable space laboratory with a "shirtsleeve" environment. The "workshop" could be launched in 1968.

Other successes in the division's continuing pursuit of Saturn-related business included winning of a contract for engineering studies on a proposed manned orbiting animal research facility utilizing a spent S-IVB stage. There was also a \$2.7 million, 60-day test program on the Saturn Instrument Unit in the Space Systems Center's 39-foot diameter space simulation chamber, which was conducted for International Business Machines Corp. and NASA.



S-IVB vehicles in vertical assembly area

MSSD Santa Monica was awarded a \$149 million contract for the continued development of the Spartan by the Army, as part of the Army's Nike-X Missile Defense System.

With increased performance over its predecessor, the Spartan is being designed to intercept ballistic missiles at longer ranges and higher altitudes with improved effectiveness.

Douglas is a major subcontractor to Bell Telephone Laboratories, Whippany, N. J., in the Nike-X program. Western Electric Company is prime contractor to the U. S. Army.

Thor celebrated its 10th anniversary in October and continued its unmatched reliability record while its production life was being assured for years to come with the introduction of a new model termed the Long Tank Thor.

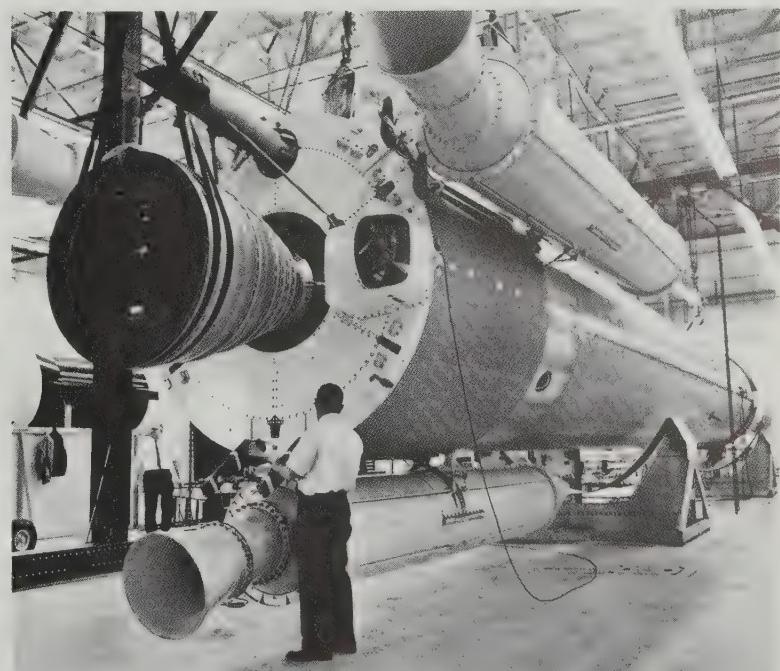
Thor was launched successfully 15 consecutive times during the year at the Air Force's Western Test Range. Its record there at year's end stood at 64 consecutive successes and its overall success mark as a space booster reached 92.

First launch of the Long Tank Thor was in August. This new version, a result of the "building block" engineering and design approach, gives the space booster a 20 per cent additional payload capacity.

The Air Force awarded Douglas a contract for 22 Long Tank Thors during the year and a further order for 29 was being negotiated at year's end, extending production of the booster to 1970. Production rates for Thor through 1966 were one and a half per month.

In eight launches during the year, the Delta space booster built by Douglas for NASA also added to its reliability record, reaching 40 successes in 43 flights, and achieved several significant firsts in the U. S. space program.

A Delta successfully orbited the first operational



Long Tank Thor undergoes vibration test

weather satellite in launch number 36. In another flight, Delta launched COMSAT's Intelsat communications satellite. The year also saw the first Delta launch from the Western Test Range.

Planning is under way for a follow-on production of 14 additional improved Delta vehicles, with deliveries to start in 1968. Twelve of these vehicles will be Long Tank Deltas, utilizing the Long Tank Thor as the first stage of the three stage booster.

The Long Tank Delta will be another growth version of the "building block" design approach by which the Delta's capability has been upgraded through several economical modifications, to keep pace with the ever-increasing demands of space programs.

MSSD Santa Monica was a member of one of three winning teams in contract definition phase awards by the Army for its SAM-D, a surface to air defense missile. Douglas is teamed with Hughes and FMC in the effort and is responsible for the missile and launcher design and development.

Further contract awards to one of the competing teams are expected in 1967.

Production of DC-9 nose structures by MSSD at Santa Monica reached 3 per week, with 99 deliveries by year's end following introduction of this assembly work in the spring. In addition to the DC-9 activity, Santa Monica augmented its DC-8 commitment, turning out a complete nose structure for the big airliner at the rate of 1 per week by December.

Other new DC-8 work included tail stub subassemblies, vertical stabilizer, and upper fuselage frames. Work on the DC-9 and DC-8 is expected to continue at Santa Monica for several years on the basis of firm aircraft sales. Approximately 4000 of the nearly 16,000 employees at Santa Monica were engaged in aircraft work by year's end.

The division's success in its continuing research and development efforts was maintained at a high level through the year. Once again, a sound program of company-funded activity and aggressive marketing combined to provide a significant growth in customer-funded R&D awards. The increase totaled more than 12 per cent, in the face of tighter market conditions.

Efforts in this area are vital to the company because current R&D activity is specifically planned to provide the basis for the division's future sales.

Independent research and development provides a carefully structured foundation of technology and experience on which to build sales efforts for new business that may be six to eight years in the future.

This directed independent research provides the foundation for winning customer-funded, systems-oriented study contracts and contracts for technological research on specific problems—as much as three or four years in advance of new hardware programs.

These efforts are of double benefit to the company. Contract work extends beyond company-funded R&D,

adding to the division's experience and technical capability. It assures that R&D programs are directly oriented toward customer requirements, and demonstrates the division's technical capability and managerial competence to the customer.

In the manned space systems area, in addition to the Saturn workshop studies, there were contracts from NASA for further studies in support of the Manned Orbiting Research Laboratory program, and for manned space experiments applicable to future programs.

Also in support of manned space technology, the division gave continued emphasis to its research in the field of biotechnology. A total of 78 days of testing on advanced life support and environmental control systems was accomplished with a four-man crew in MSSD Santa Monica's Space Cabin Simulator.

These tests, first of their kind, will provide a foundation for a planned 60-day, continuous manned test in the simulator with water recovery from human waste as well as oxygen recovery from the crew's exhaled carbon dioxide.

The division also completed its facilities development program for the year, as scheduled. Work was finished on second phase construction at the Space Systems Center in Huntington Beach. The final building in the five-unit engineering-administration complex was opened, and additions to the manufacturing and laboratory buildings were occupied.

Installation of an airlock to permit manned operations at high vacuum in the center's 39-foot diameter space simulator also was completed. It will make the chamber ready for full man-rated experiment programs at an early date.

The MSSD Astropower Laboratory, under a \$60,000 contract, delivered an electronic model of a bird's eye retina to the Air Force, for experiments in visual sensory research. Astropower's studies in this area began over two years ago, and are being continued in collaboration with the UCLA Medical Center.

The space battery developed at Astropower moved into a highly favorable marketing position this year, as a source of auxiliary power for spacecraft. Astropower also began development of a new high-intensity flash technique for night aerial reconnaissance photography, which appears to have extremely good marketing possibilities.

The continued success of the division's VIP program—for Value in Performance through Very Important People—as a means of encouraging greater efficiency, cost-consciousness, and morale was underscored at year's end by the presentation of the Air Force's prized Zero Defects Craftsmanship Award.

The award was presented to MSSD employees at special ceremonies at the Space Systems Center, recognizing three years of outstanding participation in the USAF Zero Defects program. Only seven other companies throughout the nation were so honored.

Corporate Activities

In addition to the functions of the company's groups, a wide range of activities is carried on at the corporate level by members of the president's staff and by personnel reporting to the executive vice president-operations and executive vice president-finance.

These responsibilities include finance, legal matters, public relations, marketing communications, manufacturing, properties management, pricing and information systems, research and engineering, Advanced Research Laboratories, employe relations, administration and contracts, corporate planning and procurement.

All of these activities cannot be discussed in detail but one of the significant events which can be noted was the dedication of the Advanced Research Laboratories at Huntington Beach. This addition has greatly enhanced the company's capability in the area of basic scientific inquiry.

The new facility, which began operations in January 1966 provides Douglas with a cadre of some of the nation's leading scientists who are currently conducting

investigations in four main disciplines—mathematical sciences, environmental sciences, material sciences and life sciences.

During 1966 the staff of the Laboratories doubled in size and the number of scientific papers and reports published or presented before internationally significant scientific organizations increased commensurately.

The Laboratories not only provide a solid base of new knowledge in support of development programs critical to the creation of future products and technology but also serves as a continuing in-house consulting body for the company's other laboratories.

Particularly heavy responsibilities fell to the employe relations department during a year which brought an increase in the work force to a total of 80,200, a gain of 19,900. Employment is now at one of the highest peace-time totals in the company's history.

This increase placed extremely heavy burdens on the processing, orientation and training functions of the company. Federal funds were used to train more than 4000 persons and training was given to an additional 12,000 to upgrade skills. Approximately half of the accepted applicants were women and minority groups were well represented in the total figure. A machinist apprentice-



Researchers at Advanced Research Laboratories study evolution of living biological cells through special microscope

ship program also was developed.

Support was extended to the President's Employment for Youth Program by the hiring of more than 1400 young people for summer jobs, exceeding by 750 the suggested quota.

Douglas continued its leadership in the field of Equal Employment Opportunity, with various representatives participating in a number of major conferences and seminars.

The company completed negotiations with unions at Douglas of Canada, at Tennessee locations, with the International Brotherhood of Electrical Workers of California and the Operating Engineers of California. These agreements were made within the framework of the major agreements completed in 1965, which extend until 1968.

More than 90 per cent of salaried employees are participating in the Salary Savings Plan. Assets of the plan have a market value of more than \$66 million, compared with \$47.7 million a year ago.

The company continued its support of scholarship programs, offering 35 undergraduate scholarships and 10 graduate fellowships to colleges and universities throughout the country and assisting 1708 employees in taking courses.

Douglas employees were the first such group to pledge more than \$1,000,000 to the AID program. In addition to an increase in the dollar amount, there was a gain of 10.1 per cent in the number of employees participating.

Expanded company operations also placed additional burdens on the property management department. The physical plant was increased by 1,640,000 square feet of floor space. On December 1, 1965, lease of the de Havilland facility at Malton, Ontario, added 1.3 million square feet of floor space and 55 acres of land.

Other substantial leases included 289,000 square feet of manufacturing area on 38 acres at the Lomita location in Torrance, California. The Tennessee satellite plants enclosing 103,000 square feet for aircraft sub-assembly work began operations as leased facilities. An electromagnetic test facility was established on 640 leased acres in Antelope Valley of Los Angeles county.

The company was fortunate to obtain from the City of Long Beach a long term lease on 52 acres contiguous to the airport. Construction of a 500,000 square foot warehouse and assembly building on a portion of this acreage was started in November 1966 with completion set for July 1967. This site will provide for additional expansion in future years.

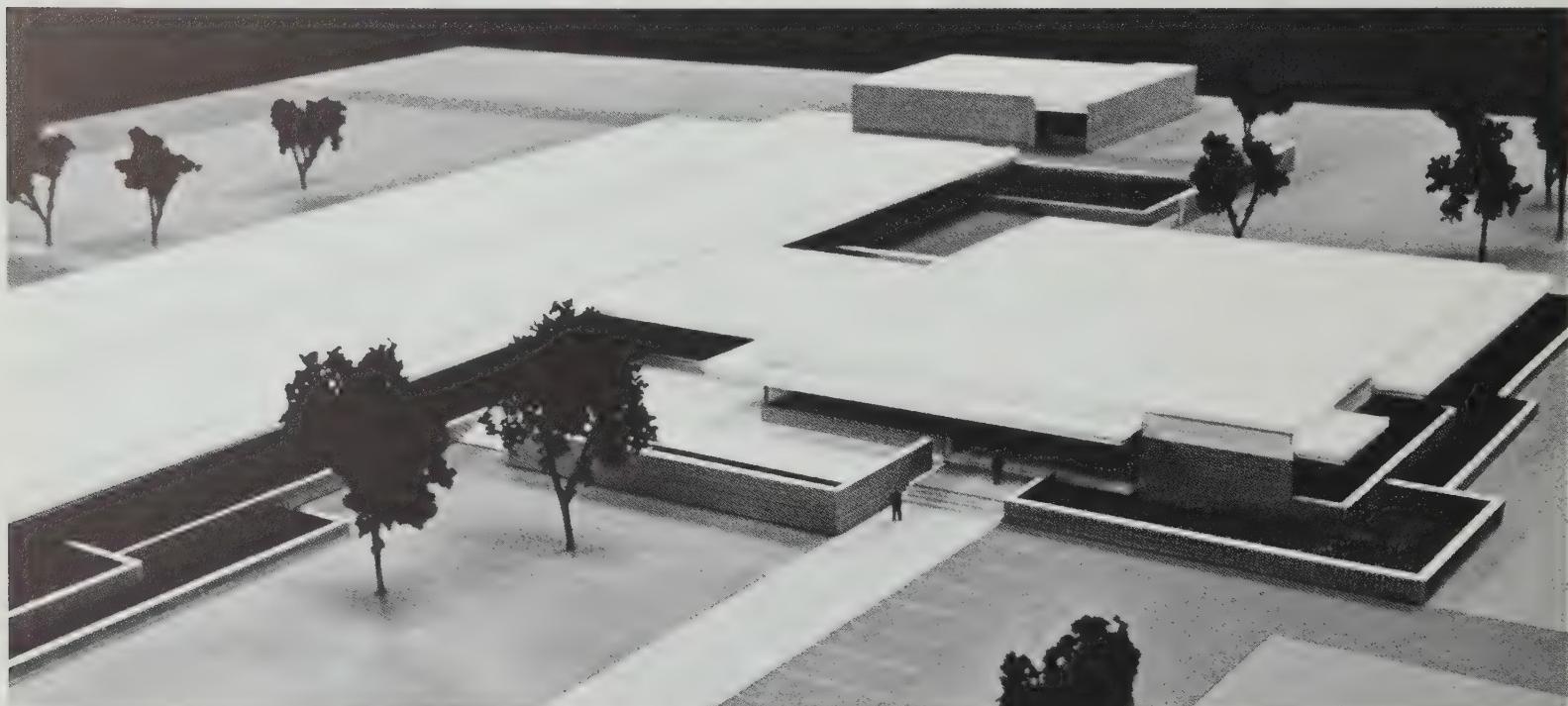
The Donald W. Douglas Laboratories at Richland, Washington, containing 59,000 square feet of floor area, were completed and occupied. The Corporate Advanced Research Laboratories at Huntington Beach, completed and staffed in 1966, add 58,000 square feet.

Additional land was obtained for the Space Systems Center with the purchase of 64 contiguous areas. The Center now contains 316 acres; 212 acres are company-owned, and 104 acres are leased under an option to purchase in 1967. At the Center, Engineering Building No. 13 with 180,000 square feet was completed.

Two properties were sold in 1966. The El Segundo plant, used partly for company warehousing, but mostly leased out, reduced square foot inventory by 427,000 square feet on 21 acres.

In a move considered to be in the best interests of the company, the Aircomb Division, including real estate, was sold to Wickes Industries, Inc., a New Jersey corporation. The real property included 74,000 square feet of floor space on 9.6 acres.

At year end, the company occupied real property totalling 18.1 million square feet of floor space.



Architect's model of Donald W. Douglas Laboratories at Richland, Washington

Financial Report 1966

EARNINGS AND SALES—Net loss for the year ended November 30, 1966, was \$27,560,000, equal to \$5.23 a share. For the preceding year, the company reported a net profit of \$14,598,000, equal to \$2.77 a share, based upon the shares outstanding at November 30, 1966.

Net sales and other revenues amounted to \$1,058,853,206, up 37 per cent from the prior year.

Commercial sales of \$487,130,000 were up 91 per cent from the 1965 total of \$254,965,000. Sales to the U. S. Government amounted to \$560,882,000, up 10 per cent over the \$511,825,000 total reported for the prior year.

Of the 1966 sales under government contracts, space programs accounted for \$350,914,000, military missiles for \$58,525,000, and military aircraft for \$151,443,000. Of these sales, 56 per cent were under cost-type contracts, compared with 66 per cent in 1965. The remaining government sales were principally under fixed-price incentive type contracts.

DIVIDENDS—During 1966 a three per cent stock dividend and three quarterly cash dividends of 25 cents a share were paid. Because of losses reported by the company for the third and fourth quarters of the year, restrictions in the company's Indentures relating to long-term debt precluded the payment of cash dividends during the remainder of the year.

BACKLOG—The company's backlog of unfilled orders at November 30, 1966, totalled \$3,274,511,000, up 60 per cent from the \$2,041,739,000 backlog at the end of the 1965 fiscal year.

Of the backlog, \$2,585,654,000 was in commercial work, up 88 per cent over the 1965 amount, including \$1,233,877,000 for DC-9 airplanes and \$1,319,898,000 for DC-8's. The corresponding backlog amounts at 1965 year-end were \$777,043,000 and \$598,933,000.

The \$688,857,000 backlog of government work at year-end included only a nominal amount for the Manned Spacecraft Program on which negotiations are now in progress.

NET WORTH—Net worth of the company decreased from \$175,067,000 at the end of 1965 to \$174,838,000 at the end of 1966. Despite the substantial net operating loss for the year, additions to capital (principally from conversion of the 4% Debentures) largely offset this deficit and resulted in the small decrease in net worth.

NET WORKING CAPITAL AND BORROWING—1966 has been a year of challenge in the financial manage-

ment of the company. The \$27,900,000 of 4% Convertible Debentures were called, and the holders of all except \$883,000 of the Debentures elected to convert their holdings into capital stock. A sizeable increase in inventories made additional financing necessary in mid-year and the company issued \$75,000,000 of 4¾% Convertible Subordinated Debentures.

Despite this additional financing, net working capital declined from \$109,277,000 at the close of 1965 to \$34,413,000 at November 30, 1966, and the ratio of current assets to current liabilities declined from 1.42 to 1, to 1.07 to 1, during the same period.

Subsequent to year-end McDonnell Company purchased 1,500,000 shares of authorized but unissued Douglas common stock for \$68,700,000, and arrangements were made for a government guaranteed V-Loan to a maximum of \$75,000,000. Other financing negotiations in progress include provision for a commercial bank loan for an additional \$75,000,000.

DEVELOPMENT—Deferred development costs, which in prior years were shown after giving effect to the related income tax benefit, have been restated at full amounts in the current financial statements, with applicable income taxes included under the heading Deferred Income Taxes.

The amount of research and development shown in the Statement of Operations for 1966 (\$29,170,818) includes \$10,387,000 for amortization of development costs on commercial airplanes.

EXPENDITURE FOR PROPERTY, PLANT AND EQUIPMENT—During 1966 the Company's expenditures for land, buildings and equipment amounted to \$41,181,000, including \$4,164,000 which had been previously committed and \$5,353,000 spent at the Canadian subsidiary. Provision for depreciation and amortization was \$18,380,000. This compares with acquisition costs, including commitments, of \$16,746,000 and depreciation and amortization of \$15,240,000 in 1965.

RENEGOTIATION—During 1966 the company received clearance for fiscal year 1963. It is our belief that the company has not realized excessive profits during subsequent years.

After completion of the 1966 financial statements, the cases seeking redeterminations of the refunds ordered for fiscal years 1953, 1954, and 1955 were settled with a reduction of approximately \$1,300,000 in the net amounts originally asserted.

TEN YEAR COMPARATIVE FINANCIAL DATA

	1966 Consolidated	1965 Consolidated	1964 Consolidated	1963 Consolidated
Net Sales	\$ 1,048,011,571	\$ 766,790,535	\$ 650,127,609	\$ 698,341,099
Other Income	10,841,635	7,736,950	3,709,977	3,358,991
Total Income	\$ 1,058,853,206	\$ 774,527,485	\$ 653,837,586	\$ 701,700,090
Cost and Expenses	1,110,745,431	749,511,172	627,935,598	677,393,424
Earnings (Loss) before Taxes	\$ (51,892,225)	\$ 25,016,313	\$ 25,901,988	\$ 24,306,666
Provision for Taxes (Refund)	(24,332,158)	10,418,000	12,207,000	12,516,000
Net Earnings (Loss)	\$ (27,560,067)	\$ 14,598,313	\$ 13,694,988	\$ 11,790,666
Percent of Net Sales				
Earnings (Loss) before Taxes	(4.95)%	3.26%	3.98%	3.48%
Earnings (Loss) after Taxes	(2.63)	1.90	2.11	1.69
Earnings (Loss) per Share (1)	\$ (5.23)	\$ 2.77	\$ 2.60	\$ 2.24
Cash Dividends per Share (1)	.75	.52	—	—
Cash and Marketable Securities	\$ 21,805,712	\$ 36,626,107	\$ 43,269,596	\$ 23,937,725
Receivables and Other Current Assets	94,623,321	100,740,803	92,377,164	98,187,059
Inventories—Net	401,868,103	233,581,978	128,853,479	118,948,930
Total Current Assets	\$ 518,297,136	\$ 370,948,888	\$ 264,500,239	\$ 241,073,714
Deduct: Notes Payable to Banks	110,783,454	—	—	—
Other Current Liabilities	373,100,707	261,671,825	135,202,824	121,593,804
Working Capital	\$ 34,412,975	\$ 109,277,063	\$ 129,297,415	\$ 119,479,910
Properties—Land	\$ 10,445,262	\$ 8,624,290	\$ 8,638,251	\$ 8,545,230
Buildings	93,580,192	87,227,525	75,031,459	73,463,618
Equipment	138,142,088	112,612,422	106,373,887	99,335,614
Tooling (2)	—	3,006,918	9,120,918	6,694,830
Total	\$ 242,167,542	\$ 211,471,155	\$ 199,164,515	\$ 188,039,292
Less: Depreciation and Amortization	117,680,640	107,148,153	99,318,841	89,236,830
Net Properties	\$ 124,486,902	\$ 104,323,002	\$ 99,845,674	\$ 98,802,462
Other Assets	207,388,074	123,928,685	53,631,104	38,983,903
Total	\$ 366,287,951	\$ 337,528,750	\$ 282,774,193	\$ 257,266,275
Less: Long-Term Debt	170,298,528	126,394,710	121,614,153	109,431,768
Reserves (3)	21,151,627	36,066,685	147,554	586,764
Net Assets	\$ 174,837,796	\$ 175,067,355	\$ 161,012,486	\$ 147,247,743
Number of Shares of Stock (1)	5,269,624	5,269,624	5,269,624	5,269,624
Book Value per Share (1)	\$33.18	\$33.22	\$30.55	\$27.94
Number of Stockholders of Record	31,303	23,311	21,190	20,445
Backlog at year end	\$3,274,511,000	\$2,041,739,000	\$ 935,861,000	\$ 882,137,000
Payrolls	639,084,000	461,326,000	349,666,000	316,301,000
Employes at year end	80,200	60,300	42,200	41,000

(1) Based on number of shares outstanding at November 30, 1966

(2) Tooling on unreleased airplanes reclassified from other assets to properties beginning in 1963

(3) Reserve for deferred income taxes included in other current liabilities prior to 1959

1962 Consolidated	1961 Consolidated	1960	1959	1958	1957
\$ 749,920,706 7,474,010	\$ 791,312,495 3,418,195	\$ 1,174,041,175 908,726	\$ 883,884,228 2,897,210	\$ 1,209,920,338 534,283	\$ 1,091,366,415 1,273,672
\$ 757,394,716 737,267,468	\$ 794,730,690 783,078,781	\$ 1,174,949,901 1,215,328,611	\$ 886,781,438 955,040,667	\$ 1,210,454,621 1,172,612,593	\$ 1,092,640,087 1,026,409,035
\$ 20,127,248 9,922,000	\$ 11,651,909 5,695,000	\$ (40,378,710) (20,949,273)	\$ (68,259,229) (34,437,000)	\$ 37,842,028 20,995,000	\$ 66,231,052 35,565,800
\$ 10,205,248	\$ 5,956,909	\$ (19,429,437)	\$ (33,822,229)	\$ 16,847,028	\$ 30,665,252
2.68% 1.36 \$1.94	1.47% .75 \$1.13	(3.44)% (1.65) \$(3.69)	(7.72)% (3.83) \$(6.42)	3.13% 1.39 \$3.20	6.07% 2.81 \$5.82
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\$ 17,538,134 124,148,089 128,684,407	\$ 27,201,603 95,384,304 116,989,856	\$ 28,387,725 131,877,403 167,951,121	\$ 35,222,458 155,516,425 196,747,468	\$ 61,301,521 197,616,792 137,090,261	\$ 32,577,447 138,900,840 160,132,917
\$ 270,370,630 18,000,000 127,896,589	\$ 239,575,763 28,000,000 91,422,438	\$ 328,216,249 60,000,000 146,249,364	\$ 387,486,351 60,000,000 170,499,633	\$ 396,008,574 37,000,000 171,613,353	\$ 331,611,204 55,000,000 155,476,650
\$ 124,474,041	\$ 120,153,325	\$ 121,966,885	\$ 156,986,718	\$ 187,395,221	\$ 121,134,554
\$ 5,543,355 55,446,817 88,279,975	\$ 5,626,688 52,908,740 83,024,081	\$ 3,250,695 43,430,741 79,528,748	\$ 3,015,438 43,392,839 83,995,123	\$ 2,804,836 42,484,323 77,959,769	\$ 2,813,216 39,368,088 69,122,810
\$ 149,270,147	\$ 141,559,509	\$ 126,210,184	\$ 130,403,400	\$ 123,248,928	\$ 111,304,114
82,164,733	77,351,675	68,842,917	63,111,084	51,251,206	40,275,177
\$ 67,105,414 38,190,453	\$ 64,207,834 38,756,117	\$ 57,367,267 31,484,330	\$ 67,292,316 5,079,945	\$ 71,997,722 4,870,503	\$ 71,028,937 4,572,737
\$ 229,769,908 91,898,053 2,414,778	\$ 223,117,276 96,330,126 1,535,321	\$ 210,818,482 87,900,000 3,623,562	\$ 229,358,979 87,900,000 2,734,622	\$ 264,263,446 87,900,000 -----	\$ 196,736,228 27,900,000 -----
\$ 135,457,077	\$ 125,251,829	\$ 119,294,920	\$ 138,724,357	\$ 176,363,446	\$ 168,836,228
5,269,624 \$25.71 21,210	5,269,624 \$23.77 21,044	5,269,624 \$22.64 22,782	5,269,624 \$26.33 21,733	5,269,624 \$33.47 19,025	5,269,624 \$32.04 17,167
\$ 806,099,000 307,571,000 44,000	\$ 759,430,000 285,679,000 38,500	\$ 1,030,177,000 388,938,000 49,700	\$ 1,317,277,000 450,835,000 65,500	\$ 1,543,736,000 458,094,000 71,900	\$ 1,803,620,000 463,228,000 76,400

ACCOUNTANTS' REPORT

To the Stockholders and
Board of Directors
Douglas Aircraft Company, Inc.
Santa Monica, California

We have examined the statement of consolidated financial position of Douglas Aircraft Company, Inc. and consolidated subsidiaries as of November 30, 1966, and the related statements of consolidated operations, stockholders' equity, and changes in consolidated working capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to confirm by direct correspondence certain amounts included as receivable from the U. S. Government and other customers, but we satisfied ourselves as to such amounts by other means.

In our opinion, subject to the ultimate recovery of the investment in The LaFleur Corporation and the final determination of litigation, described respectively in Notes A and K to financial statements, the accompanying statements of financial position, operations, and stockholders' equity present fairly the consolidated financial position of Douglas Aircraft Company, Inc. and consolidated subsidiaries at November 30, 1966, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year, and the statement of changes in consolidated working capital presents fairly the information therein shown.

Los Angeles, California
January 21, 1967

Ernst & Ernst

STATEMENT OF CONSOLIDATED OPERATIONS

	Years ended November 30	
	1966	1965
Net sales	\$1,048,011,571	\$766,790,535
Interest income	5,619,330	4,944,340
Other income — net	5,222,305	2,792,610
	<u>1,058,853,206</u>	<u>774,527,485</u>
Costs and expenses:		
Manufacturing costs	945,832,653	632,969,045
Administrative and general expenses	115,297,494	90,687,153
Research and development	29,170,818	17,744,481
Interest expense	16,444,466	8,110,498
Provision for possible future loss on investment in subsidiary—Note A	<u>4,000,000</u>	<u>1,110,745,431</u>
	<u>(51,892,225)</u>	<u>749,511,172</u>
Income (Loss) Before Income Taxes	(24,332,158)	10,118,000
Federal and Canadian (1966—\$250,812) income taxes—Note E	(27,560,067)	\$ 14,598,313
Net Income (Loss)	\$ (27,560,067)	\$ 14,598,313

Provisions for depreciation amounted to \$18,380,386 in fiscal 1966 and \$15,240,424 in fiscal 1965

STATEMENT OF STOCKHOLDERS' EQUITY

	Year ended November 30, 1966		
	Capital Stock	Additional Capital Paid In	Retained Earnings
	Shares	Amount	
Balances at December 1, 1965	4,634,128	\$38,617,733	\$21,676,027
Issuance of Capital Stock:			\$114,773,595
In conversion of 4% Convertible Subordinated Debentures	359,076	2,992,300	23,560,649
In payment of 3% stock dividend at approximate market price of shares issued	141,036	1,175,300	10,565,947
To officers and employes under stock option agreements	122,984	1,024,867	3,036,593
As contribution to employee savings plan at approximate market price of shares issued	12,400	103,333	412,817
Cash dividends paid—\$.75 a share			(3,800,051)
Net loss for the year			(27,560,067)
Balances at November 30, 1966	<u>5,269,624</u>	<u>\$43,913,533</u>	<u>\$59,252,033</u>
			<u>\$ 71,672,230</u>

See notes to financial statements

STATEMENT OF CONSOLIDATED FINANCIAL POSITION

	November 30	
	1966	1965
ASSETS		
Current Assets		
Cash	\$ 15,805,712	\$ 6,767,731
Marketable securities	6,000,000	29,858,376
Accounts receivable from U.S. Government, including unreimbursed costs and fees under cost-reimbursement type contracts—Notes B and D	14,733,218	54,538,104
Other trade receivables—Notes C and D	23,503,450	24,011,291
Refundable federal income taxes—Note E	12,315,521	13,396,621
Inventories—Notes B and D	101,368,103	233,581,978
Prepaid expenses	14,071,132	8,761,781
Total Current Assets	518,297,136	370,948,888
Property, Plant, and Equipment—Note C		
Buildings, equipment etc.—at cost	228,917,158	192,900,790
Less allowances for depreciation	117,680,640	107,148,153
	111,266,518	85,752,637
Land—at cost	10,445,262	8,624,290
Tooling allocable to airplanes not yet released for production	3,006,918	
Funds held for additional construction and property acquisitions	2,775,122	6,939,157
	124,486,902	104,323,002
Other Assets and Deferred Charges		
Development costs—Note F	127,985,687	70,217,687
Aircraft leased to customers, less allowances for depreciation	28,406,579	17,619,038
Noncurrent portion of trade receivables—Notes C and D	39,931,216	22,189,546
Property not used in operations, less allowances for depreciation	4,077,890	
Investment in The La Fleur Corporation—Note A	8,453,800	8,179,000
Sundry	2,610,792	1,315,521
	207,388,074	123,928,685
\$850,172,112	\$599,200,575	

November 30

LIABILITIES AND STOCKHOLDERS' EQUITY

Current Liabilities

	1966	1965
Notes payable to banks — Note D	\$110,783,454	\$
Accounts payable	183,256,432	126,223,395
Salaries, wages, and amounts withheld from payrolls	40,039,094	30,449,901
Taxes, other than income taxes	12,964,552	9,158,136
Advances received in excess of expenditures on contracts—Note D	131,794,511	91,657,725
Current maturities on long-term debt—Note C	<u>5,046,118</u>	<u>4,182,668</u>
Total Current Liabilities	483,884,161	261,671,825

Long-Term Debt (less current maturities) — Note C

4 3/4% Convertible Subordinated Debentures	75,000,000	
5% Sinking Fund Debentures	41,250,000	45,000,000
4% Convertible Subordinated Debentures		27,900,000
Space Center Secured Notes	30,513,464	31,593,618
5% trust deed note and contract	6,106,121	6,639,192
Airline Financing 5 1/4% Secured Notes	12,632,903	15,261,900
Equipment and lease-purchase obligations	<u>4,796,040</u>	
	<u>170,298,528</u>	<u>126,394,710</u>
Deferred Income Taxes — Note E	21,151,627	36,066,685

Stockholders' Equity — Notes C, G, I and L

Capital Stock — no par value; authorized 8,000,000 shares; issued and outstanding 1966—5,269,624 shares, 1965—4,634,128 shares	43,913,533	38,617,733
Additional capital paid in	59,252,033	21,676,027
Retained earnings	<u>71,672,230</u>	<u>114,773,595</u>
	<u>174,837,796</u>	<u>175,067,355</u>

Commitments and Contingent Liabilities

Notes H, I, J, and K	<u>\$850,172,112</u>	<u>\$599,200,575</u>
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See notes to financial statements

STATEMENT OF CHANGES IN CONSOLIDATED WORKING CAPITAL

Year ended November 30, 1966

Decreases resulting from:

Net loss for the year	\$ 27,560,067
Operations-statement items which did not affect working capital:	
Provisions for depreciation	\$ 18,380,386
Amortization of development costs	10,387,000
Provision for possible future loss on investment in subsidiary	4,000,000
	<u>32,767,386</u>
Decrease in deferred income taxes	14,915,058
	<u>17,852,328</u>
	9,707,739

Additions to:

Development costs of DC-8 and DC-9 aircraft	68,155,000
Property, plant, and equipment—net	33,321,280
Noncurrent portion of trade receivables	17,441,670
Aircraft leased to customers	15,757,814
Investment in The LaFleur Corporation	4,274,800
Sundry other assets and deferred charges	145,270
Payment of cash dividends	3,800,051
Redemption (\$883,000) and conversion expenses of 4% Convertible Subordinated Debentures	1,347,051
Decrease in long-term debt, other than 4% and 4½% Convertible Subordinated Debentures	3,196,182
	<u>157,146,857</u>

Increases resulting from:

Issuance of \$75,000,000 of 4½% Convertible Subordinated Debentures, less related expenses	73,850,002
Issuance of Capital Stock under stock option and salary savings plans	4,577,610
Carrying value at date of disposal of property not used in operations	3,855,157
	<u>82,282,769</u>
Decrease in Working Capital	<u>\$ 74,864,088</u>

See notes to financial statements

Notes to financial statements

NOVEMBER 30, 1966

NOTE A—CONSOLIDATION The consolidated financial statements include the accounts of the Company and its wholly-owned domestic and Canadian subsidiaries (Douglas Finance Corporation, Douglas Realty Company, Inc., and Douglas Aircraft Company of Canada Ltd.). Significant intercompany accounts, transactions, and profits have been eliminated in consolidation. The accounts of the Canadian subsidiary have been translated to U. S. currency on the basis of the current rate of exchange. Because of immateriality, the accounts of Douglas Aircraft Company of Canada Ltd. prior to December 1, 1965, and the accounts of Douglas Aircraft Company (Japan) Ltd. have not been included in the consolidated financial statements.

Prior to December 1, 1965, the Company made a \$299,000 investment in and made advances of \$7,880,000 to The LaFleur Corporation. During fiscal 1966, the Company advanced an additional \$4,200,000 and increased its ownership to 95%, principally through the conversion of all such advances into the subsidiary's capital stock. The activities of the subsidiary to date have been totally involved in the development of cryogenic processes and equipment, and as a consequence, all costs incurred by it have been capitalized. The investment in The LaFleur Corporation has been stated at cost, less an allowance of \$4,000,000 for possible future loss.

NOTE B—CONTRACTS AND INVENTORIES The Company's business is performed under cost-reimbursement type contracts or fixed-price type contracts. Cost-reimbursement type contracts provide for the reimbursement of allowable costs and the payment of fees as specified in the respective contracts. Certain of the contracts contain incentive provisions whereby the Company receives increased or decreased fees dependent upon performance in relation to targets as set forth in the contracts. Sales include allowable costs incurred plus applicable fees. Fees and incentive adjustments related to costs are included in sales based upon the ratio of contract costs incurred to current estimates of total contract costs. Incentive adjustments related to performance other than cost are included in sales when the amounts can reasonably be determined.

Inventories at November 30, including certain items to which the U. S. Government held title by reason of contract provisions, consisted of the following:

	1966	1965
Fixed-price contracts and orders in progress	<u>\$578,917,342</u>	<u>\$276,722,623</u>
Materials, spare parts, etc. . .	108,312,699	48,508,846
Advances under material purchase agreements	<u>32,582,937</u>	<u>43,356,022</u>
	<u>719,812,978</u>	<u>368,587,491</u>
Less advance and progress payments received	<u>317,944,875</u>	<u>135,005,513</u>
	<u>\$401,868,103</u>	<u>\$233,581,978</u>

Fixed-price contracts in progress, other than aircraft orders, are stated on the basis of accumulated costs, less the portion of such costs allocated to items delivered, but not in excess of recoverable amounts. Costs relating to items delivered are computed at the average cost of each unit based on the estimated total cost of the contract. Aircraft orders in progress are stated at costs incurred to date less the specific unit costs of delivered aircraft, and, where applicable, reduced to realizable market, after giving effect to total estimated costs at completion. Certain of the fixed-price contracts contain incentive provisions. Sales, including applicable adjustments to recognize cost incentive provisions, are recorded as items are delivered. Incentive adjustments related to performance other than cost are recorded when the amounts can reasonably be determined.

Materials, spare parts, etc. are stated at the lower of cost (generally first-in, first-out method) or market.

NOTE C—LONG-TERM DEBT During fiscal 1966, the Company sold \$75,000,000 of 4 3/4% Convertible Subordinated Debentures, due 1991. The Indenture related to these Debentures provides for a sinking fund commencing in 1977. The Debentures are convertible into the Company's Capital Stock, and at November 30, 1966, 937,500 shares of Capital Stock were reserved for conversion at \$80 a share. The conversion price and shares reserved for conversion are subject to adjustment in accordance with anti-dilution provisions of the Indenture.

The 5% Sinking Fund Debentures, due 1978, require sinking fund payments of \$3,750,000 annually on March 31st. At November 30, 1966, the Company had satisfied the 1967 sinking fund requirement by purchases of the Debentures on the open market.

The 4% Convertible Subordinated Debentures, due 1977, were called for redemption by the Company at 102.125% on April 13, 1966. Holders of \$27,017,000 of the Debentures elected, prior to the redemption date, to convert their holdings into 359,076 shares of the Company's Capital Stock.

The Space Center Secured Notes consist of 5 1/2% Notes (\$20,085,383) due 1984, and 5 1/4% Notes (\$10,428,081) due 1986 which are payable in annual amounts of \$1,877,512 and \$891,668, respectively, including interest. The Notes are secured by indentures of mortgage and deed of trust on the Company's interest in certain land and buildings (carrying value—\$33,400,000).

The 5% trust deed note and contract, due 1971, secured by certain other properties (carrying value—\$8,400,000) are payable in quarterly installments (\$507,568 annually) beginning January 4, 1967, with a final payment of \$4,329,633 due July 4, 1971.

The Airline Financing 5 1/4% Secured Notes, due 1974, are secured by assignment of trade receivables (\$10,204,632 at November 30, 1966) and certain lease payments receivable to 1974 which aggregate \$7,500,000 from November 30, 1966. The principal payments on the Notes in fiscal 1967 will aggregate \$2,628,997, with varying amounts due in succeeding years.

Equipment and lease-purchase obligations consist of a 5% equipment purchase obligation (\$1,618,200) due in annual installments of approximately \$540,000, and 3 3/4% to 4 3/4% lease-purchase obligations (\$3,177,840) due in aggregate annual installments of approximately \$300,000 to \$400,000 to 1976.

Under the most restrictive provision relating to long-term debt, no retained earnings at November 30, 1966, were available for the payment of cash dividends on the Company's Capital Stock or for the purchase, redemption, or other acquisition or retirement of such stock.

NOTE D—BANK LOANS AND CREDIT AGREEMENTS The Company has pledged or assigned as collateral for \$65,124,132 notes payable to banks (1) all receivables and inventories, aggregating approximately \$61,500,000 at November 30, 1966, relating to U. S. Government contracts other than those with National Aeronautics and Space Administration, and (2) certain trade receivables (\$29,623,934 at November 30, 1966) and certain aircraft lease payments receivable to 1971, which aggregate \$13,983,229 from November 30, 1966.

In December 1966, a demand debenture was issued as collateral for borrowings up to \$46,600,000 (\$45,659,322 borrowed at November 30, 1966) of Douglas Aircraft Company of Canada Ltd. Such demand debenture is a first lien, in the event of default, against all the business and assets of the Canadian subsidiary.

Subsequent to November 30, 1966, the Company has been in negotiations with banks toward new financing arrangements for borrowings of \$150,000,000 and with customers and suppliers concerning additional interest-bearing obligations.

The Company has made arrangements with certain airlines whereby the airlines make interest-bearing advances (\$103,172,070 at November 30, 1966), which will be applied to the sales price upon delivery of the aircraft. Of such advances \$21,357,900 have been deducted from inventories of related aircraft.

NOTE E—INCOME TAXES The credit for federal and

Canadian income taxes for fiscal 1966 consists of \$12,315,521 refundable taxes arising from carry-back of operating loss and \$12,016,637 applied to reduce deferred income taxes principally as a result of giving effect to the remainder of operating loss and applicable investment credit.

Income taxes which would otherwise have been payable in fiscal 1963, 1964, and 1965, were deferred to future years because of certain income tax and financial reporting differences, principally with respect to development costs (see Note F to financial statements). Deferred income taxes of \$34,430,095 at November 30, 1965, previously reported as an offset to development costs deferred, have been reclassified in the statement of consolidated financial position to conform to November 30, 1966 classification.

The Company credits operations for the investment credit in the year of acquisition with respect to normal property additions (other than tooling), on the basis of delivered aircraft with respect to that applicable to tooling, and generally over the lives of leases with respect to that applicable to leased aircraft.

NOTE F—DEVELOPMENT COSTS Development costs of the DC-9 and advanced versions of the DC-8 jet aircraft programs are deducted when incurred for income tax purposes; however, for financial accounting purposes such costs are deferred subject to amortization over the respective programs on the basis of deliveries. The Company's method of accounting identified initial high manufacturing costs in fiscal years 1964 and 1965, and in the early part of fiscal 1966, with the first production lot of twenty DC-9 aircraft. As a result of such identification, the Company charged operations in such periods with substantial amounts representing reductions of inventories to realizable values. Because of the substantial charges to operations in connection with the first production lot of DC-9 aircraft, the Company commenced amortization of applicable deferred development costs with the second production lot. With respect to the advanced versions of the DC-8 aircraft, it is contemplated that initial deliveries will be made in the early part of fiscal 1967 and that amortization of applicable deferred development costs will commence with the initial delivery of production aircraft.

NOTE G—STOCK OPTION PLANS The Company's stock option plans (adopted in 1959 and 1966) provide for the granting to certain key employes options to purchase shares of the Company's Capital Stock. The options are exercisable over maximum terms of five or seven years dependent upon the dates of grants.

Under the 1959 plan, after recognition of the effect of the 3% stock dividend in fiscal year 1966, options for 131,504 shares were outstanding at the beginning of the year. During the year, options for 1,946 shares, previously considered cancelled, were restored and options for 122,984 shares were exercised. At November 30, 1966, options for 10,466 shares were outstanding at \$20.03 per share (total option price \$209,634). However, as there will be no further grants under this plan, no additional shares were reserved.

Under the 1966 plan, approved by the Company's shareholders on April 20, 1966, no options have been granted, and as it is not contemplated that there will be any grants, no shares are reserved.

NOTE H—EMPLOYEE PENSION PLANS The Company and its Canadian subsidiary have noncontributory pension plans covering substantially all employees. Future annual costs of the plans are indeterminate because of the dependence upon employee compensation. Amounts accrued and charged against income during fiscal 1966, amounted to \$24,479,000 including \$2,406,000 with respect to past services. The Company's policy is to fund all such amounts accrued. After giving effect to the aforementioned \$2,406,000, the single sum amount, as actuarially computed, required to fully fund past service costs approximated \$18,900,000, which amount will be amortized over the next ten years.

NOTE I—COMMITMENTS AND CONTINGENT LIABILITIES The Company has agreed, if requested, to make loans and accept participation to assist in the financing of certain ordered but undelivered aircraft; to guarantee financing of certain

ordered but undelivered aircraft; and to manufacture and lease a number of aircraft. The total potential obligation under such agreements as of November 30, 1966, was approximately \$410,000,000.

At November 30, 1966, the Company was guarantor of approximately \$4,300,000 of customers' note obligations and applicable interest thereon, was guarantor against possible loss (limited to approximately \$32,000,000) upon ultimate disposition of aircraft owned by certain customers, and with respect to a lease covering certain aircraft, guaranteed, among other things, that the lease will remain in effect until 1979 (aggregate lease payments of approximately \$42,000,000). Other guarantees and contingent liabilities, which are related to various transactions, approximate \$1,500,000.

If the Company should become obligated pursuant to some of the foregoing guarantees, it would concurrently recover the use of the aircraft to which the guarantees relate.

The Company and its consolidated subsidiaries have authorized expenditures of approximately \$12,500,000 for construction of facilities and for additional equipment.

The aggregate rental obligations of the Company and its consolidated subsidiaries under long-term leases in effect at November 30, 1966, amounted to approximately \$17,500,000 of which \$3,500,000 is payable in fiscal 1967. Such amounts exclude rentals under leases terminable within one year.

The Company's voluntary savings plans provide that the Company contribute to a trustee amounts equal to certain percentages of the amounts contributed by employes. The Company's contributions generally are made in cash; however, in the case of one plan, certain contributions may be made by the issuance of the Company's Capital Stock at the fair market thereof at the date issued. The Company's contribution in fiscal 1966 was \$12,110,485 of which \$516,150 represented 12,400 shares of Capital Stock. At November 30, 1966, there were 137,600 shares of Capital Stock reserved for future issuance under the plan. The future annual costs of the plans are indeterminate because of dependence upon employee compensation and participation.

NOTE J—RENEGOTIATION Certain business done by the Company subsequent to November 30, 1963, is subject to renegotiation by the U. S. Government, but the Company believes no renegotiation refund will be required.

NOTE K—LITIGATION A number of lawsuits have been instituted against the Company, some of which purport to be class actions, seeking recovery for losses alleged to have been incurred as a result of alleged violations of the Securities Act of 1933 and the Securities Exchange Act of 1934, as amended, Rules and Regulations issued thereunder, or the common law. In general, these lawsuits charge the Company with alleged misleading and false statements of material fact and alleged omissions to state material facts needed to make some of these statements not misleading. They involve security holders who converted 4% Convertible Subordinated Debentures into the Company's Capital Stock and persons who purchased Capital Stock or Debentures of the Company during various periods of time in 1966. A separate derivative lawsuit alleges liability on the theory of waste of corporate assets in connection with the foregoing. The Company has filed answers denying the material allegations of each complaint and alleging in addition certain affirmative defenses which the Company intends to prove.

The Company was also defendant at November 30, 1966, in other civil actions which Company Counsel believes either to be without merit or will not result in a substantial loss to the Company.

NOTE L—PROPOSED MERGER AND CONSOLIDATION On January 13, 1967, the Board of Directors authorized negotiations toward a merger or consolidation of the Company with McDonnell Company, and authorized the sale of 1,500,000 shares of the Company's authorized and unissued Capital Stock at \$45.80 a share to McDonnell Company.

OFFICES AND REPRESENTATIVES

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Douglas Advanced Research Laboratories, 5251 Bolsa Avenue,
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WHOLLY-OWNED SUBSIDIARIES:

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Douglas Realty Company, Inc., 3000 Ocean Park Boulevard,
Santa Monica, California 90406
Douglas Aircraft Company of Canada, Ltd., Malton, Ontario, Canada
Douglas Aircraft Company (Japan), Ltd., Sanyo Building,
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AIRCRAFT GROUP:

Divisions:

Aircraft Division, 3855 Lakewood Boulevard, Long Beach,
California 90801
Aircraft Modification Division, 2000 North Memorial Drive,
Tulsa, Oklahoma 74115
Vortec Products Company, 1414 West 190th Street, Torrance,
California 90503

California Locations:
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90801
Lomita, Sub-Assembly Facility, 2750 W. Lomita, 90503
Palmdale, Production, Assembly & Flight Test, P.O. Box 248, 93550
Santa Monica, Supercharger Overhaul, 1909 Centinela Boulevard,
90406
Torrance, Sub-Assembly Facility, 190th Street & Normandie
Avenue, 90503
Torrance, Sub-Assembly Facility, 22309 S. Western Avenue, 90503

MISSILE & SPACE SYSTEMS GROUP

Space Systems Center, Huntington Beach, California 92646

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Johnston Island

Kwajalein Atoll, Marshall Islands



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